

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method, comprising:
detecting an error in data stored in a directory cache ~~storage device~~ in a system;
determining if the detected error is correctable; and
making at least a portion of the directory cache ~~storage device~~ unavailable to one or more resources in the system in response to determining that the error is uncorrectable, wherein making at least the portion of the directory cache unavailable comprises generating a cache miss in response to a request to access the directory cache.
2. (Original) The method of claim 1, wherein detecting the error comprises detecting the error in the data using error correction code.
3. (Original) The method of claim 2, wherein determining if the detected error is correctable comprises determining that the detected error is a multi-bit error.
4. (Original) The method of claim 1, wherein determining if the detected error is correctable comprises determining that the detected error is an address parity error.
5. (Currently amended) The method of claim 1, wherein making at least the portion of the directory cache ~~storage device~~ unavailable comprises making at least the portion of the directory cache ~~storage device~~ unavailable while the system is in operation.

6. (Currently amended) The method of claim 1, further comprising testing the directory cache storage device based on determining that the error is uncorrectable.
7. (Currently amended) The method of claim 6, further comprising servicing the directory cache storage device in response to testing the directory cache storage device.
8. (Currently amended) The method of claim 7, further comprising dynamically allowing access to the directory cache storage unit in response to servicing the directory cache storage device.
9. (Cancelled)
10. (Currently amended) An apparatus, comprising:
a directory cache adapted to store at least one entry; and
a control unit is adapted to:
determine if at least one uncorrectable error exists in the directory cache;
and
place at least a portion of the directory cache offline in response to determining that the error is uncorrectable, wherein placing at least the portion of the directory cache unavailable comprises generating a cache miss in response to a request to access the directory cache.
11. (Original) The apparatus of claim 10, wherein the directory cache is a three-way associative directory cache.
12. (Original) The apparatus of claim 10, wherein the control unit determines if the entry contains a multi-bit error.

13. (Original) The apparatus of claim 12, wherein entry is an address bit entry, and wherein the control unit determines if the address parity bit entry contains an error.
14. (Original) The apparatus of claim 10, wherein the directory cache is associated with a domain, and wherein the control unit places the directory cache offline while the domain is active.
15. (Original) The apparatus of claim 14, wherein the control unit provides a cache miss to a device requesting to access the directory cache while the directory cache is offline.
16. (Original) The apparatus of claim 14, wherein the control unit tests the directory cache in response to determining that the error is uncorrectable.
17. (Original) The apparatus of claim 15, wherein the control unit causes the directory cache to be serviced in response to testing the directory cache.
18. (Original) The apparatus of claim 15, wherein the control unit places the directory cache on-line in response to causing the directory cache to be serviced.
19. (Original) The apparatus of claim 18, wherein the control unit places the directory cache online dynamically.
20. (Currently amended) A carrier medium ~~An article comprising one or more machine-readable storage media~~ containing instructions that when executed enable a processor to:
determine a multiple-bit error in data stored in a directory cache ~~storage device~~ of a domain; and
isolate at least a portion of the directory cache ~~storage device~~ from one or more resources in the domain while the domain is active, in response to

determining the multiple-bit error, wherein isolating at least the portion of the directory cache comprises generating a cache miss in response to a request to access the directory cache.

21. (Currently amended) The carrier medium ~~article~~ of claim 20, wherein the instructions when executed enable the processor to perform an ECC error check to determine the multiple-bit error in the data.
22. (Currently amended) The carrier medium ~~article~~ of claim 20, wherein the instructions when executed enable the processor to dynamically test the directory cache storage device in response to isolating the directory cache storage device.
23. (Currently amended) The carrier medium ~~article~~ of claim 20, wherein the instructions when executed enable the processor to dynamically restore the directory cache storage device in the domain.
24. (Currently amended) The carrier medium ~~article~~ of claim 20, wherein the instructions when executed enable the processor to provide a cause of the multiple-bit error.